Fin 3433: Rental Proforma Notes

All of the computations noted below depend on the inputs shaded in blue. Nothing but formulas are required to complete the spreadsheet once the input figures are given. This inputs allow you specify the annual property taxes separately, with all other expenses, including CAPEX input as a single figure under Other Operating Exp.

Top Section
- The Initial Depreciation Basis is the Purchase Price Plus the Acquisition Costs Minus the Land Value.
- The Annual Depreciation is Initial Depreciation divided by the Depreciation Period.
- The Mortgage Amount is the Purchase Price times the LTV.
- The Mortgage Payment can be computed using the PMT function in Excel (use Excel Help if need).
- The balance after 60 months is the PV of the remaining payments (Use the Excel PV function)
- The Prepay Penalty is the Prepay Penalty % times the Ending Loan Balance. As this is a residential mortgage you will probably not have a prepayment penalty.

Before and After Tax Cash Flow by Year.
- The Operations Cash Flow values are taken from computations noted below and presented as a summary here. First compute values below, and then link them to this summary area.
- The Year 0 Capital Cash Flow can be computed as: Purchase Price + Acquisition Cost + Points (Dollar Amount) – Mortgage Amount. The dollar amount of the points is the Mortgage Amount times the Points. Link this cell to the After Tax portion as it is the same.
- The Year 5 Capital Cash Flow is computed near the bottom of the spreadsheet and then linked to the appropriate cell
- After you have done the linking you can compute the Total CF which is the sum of the Operations and Capital Figures.
- For the IRR calculations, use the IRR function on the Total CF.
- For the NPV, use the NPV function. Note: The NPV function in Excel assumes the first cash is one period from now, so use the NPV for CF Year 1-5, and then subtract off the initial CF. The rate for discounting is from the input cell labeled “Equity Hurdle Rate”.
- Debt Coverage Ratio – Ignore this section if you wish, it’s used primarily for commercial loans. The Debt Coverage Ratio is the NOI divided by the Mortgage Payment.
- Cash on Cash Return – You may ignore this section if you wish. It is the Before Tax CF divided by the Initial Investment.

Cash Flow From Operations.
- Gross Rent is the monthly rent times 12 for period 1. It is then increased at the rate input as Growth Rate in Rent.
- Vacancy is the percent of Gross Rent specified in the Vacancy Rate cell.
- Other Income is typically zero for residential rental houses.
- Effective Gross Income is Gross Rent minus Vacancy Plus Other Income
- Operating Expense for Year 1 is the sum of the Property Taxes and Other Operating Exp. This figure increases each year at the rate specified as Growth Rate in Exp
- NOI is the EGI minus the Operating Expense
- Mortgage Payment is the 12 times the monthly payment computed earlier and is level
• Before Tax Cash Flow is the NOI minus the Mortgage Payment. If you have no mortgage (ie. LTV=0), then this will be the NOI. Link this cell to the Operations line in the Before Tax Cash Flow by Year area

• Taxes are the taxes due from this investment. Link this to the cell below where it is computed.

• After Tax Cash Flow is the Before Tax Cash Flow minus the Taxes. Link this cell to the Operations Line in the After Tax Cash Flow by Year area

**Income Taxes From Operations**

• End of Year Loan Balance is calculated to aid in the computation of the amount paid to interest. It is the present value of the remaining payments. Use the PV function as done above to get the mortgage balance, with nper as the number of periods remaining on the loan. So nper = 12*([cell near top with Term] - [cell above with current year])

• NOI is linked from where it is calculated above

• Interest is the interest paid that year. One way to compute is 12 times the monthly payment minus (last years loan balance – this years loan balance). In words, interest is the total payments minus the principal reduction

• Amortized finance cost is the dollar amount paid in points divided by the term of the loan. Any finance cost not written off during the term of the loan can be written off when the loan is repaid, so the figure for the final year is the dollar amount of the points minus the sum of the charges taken to date

• Depreciation is computed above so link to that cell. For the first and last year you may wish to use the “mid month rule” and only take 11.5/12 of the annual depreciation.

• Taxable Income is the NOI minus the Interest Paid minus the Amortized Finance Costs minus Depreciation

• Taxes due is the Marginal Tax Bracket times the Taxable Income. Link to this cell at the appropriate place above in Cash Flow From Operations

**Cash Flow From Resale**

• Estimated Sales Price is the NOI in year 6 divided by the Going Out Cap Rate

• Sales Expense is the Estimate Sales Price times the Selling Expense

• Net Sales Price is the Estimated Sales Price minus the Selling Expense. Link this value to the appropriate cell to the right.

• Mortgage Payoff is the figure computed near the top, so link to that cell

• Before Tax Equity Reversion is the Net Sales Price minus the Mortgage Payoff. This is the Before Tax CF from Capital for Year 5, so link this cell to the appropriate cell above

• Taxes on Sale is computed else where (described below). Link from the appropriate cell.

• After Tax Equity Reversion is the Before Tax Equity Reversion minus the Taxes on Sale. Link this cell to the appropriate cell above for After tax Capital CF above.

**Gain on Sale**

• Net Sales prices was computed above. Link this cell to that figure.

• Adjusted Basis is the Purchase Price Plus Acquisition Costs minus the sum of the depreciation from Year 1 to 5 (called the accumulated depreciation).

• Gain on Sale is the Net Sales Price minus the Adjusted Basis

• Depn Recovery is minimum of the accumulated depreciation or the Gain on Sale

• Capital Gain is the Gain on Sale minus the Depn Recovery

• DepRecTax is the Depn Recovery times the Depn Recovery Tax Rate

• Cap Gain Tax is the Capital Gain times the Capital Gain Rate

• Total Tax on Sale is the DepRecTax plus Cap Gain Tax. Link this figure to the appropriate cell to the left.